

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled)

2. (Previously Presented) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor layer over an insulating surface;

forming a first insulating film over the semiconductor layer;

forming a first wiring comprising at least a laminate of a first conductive film with a property as a barrier and a second conductive film containing copper as its main component, said step of forming a first wiring including the steps of:

(i) forming the first conductive film over the first insulating film;

(ii) etching the first conductive film;

(iii) forming the second conductive film on the first conductive film through an opening of a mask;

(iv) reducing a width of the second conductive film with dry etching;

doping an impurity element into the semiconductor layer with the first wiring as a mask to form an impurity region;

forming a second insulating film over the first wiring;

forming a contact hole to reach the impurity region in the second insulating film;

and

forming a second wiring electrically connected to the impurity region over the second insulating film.

3. (Previously Presented) A method of manufacturing a semiconductor device

according to claim 2 further comprising the steps of:

forming a third conductive film with a property as a barrier over the second insulating film;

etching the third conductive film;

forming a fourth conductive film containing copper as its main component on the third conductive film through an opening of a mask; and

reducing a width of the fourth conductive film with dry etching to form the second wiring.

4. (Canceled)

5. (Canceled)

6. (Original) A method according to claim 2, wherein the first conductive film comprises TiN as its main component.

7. (Canceled)

8. (Canceled)

9. (Original) A method according to claim 2, wherein the first conductive film comprises a laminate of a film containing Ti as its main component and a film comprising one of TiN, TaN, WN, TiC, TaC, and silicon.

10. (Canceled)

11. (Canceled)

12. (Original) A method according to claim 2, wherein the first conductive film comprises a laminate of a film containing Ti as its main component and a film comprising one of TiN, TaN, WN, TiC, TaC, and silicon formed on the film containing Ti as its main component.

13. (Canceled)

14. (Canceled)

15. (Original) A method of manufacturing a semiconductor device according to claim 2, wherein an insulating film with a property as a barrier comprising at least one of silicon nitride, silicon oxynitride, aluminum nitride, and aluminum oxynitride is formed with sputtering to cover the second conductive film.

16. (Canceled)

17. (Original) A method of manufacturing a semiconductor device according to claim 3, wherein an insulating film with a property as a barrier comprising at least one of silicon nitride, silicon oxynitride, aluminum nitride, and aluminum oxynitride is formed with sputtering to cover the fourth conductive film.

18. (Previously Presented) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor layer over an insulating surface;

forming a first insulating film over the semiconductor layer;

forming a first wiring comprising at least a laminate of a first conductive film with a property as a barrier and a second conductive film containing copper as its main component, said step of forming a first wiring including the steps of:

- (i) forming the first conductive film over the first insulating film;
 - (ii) etching the first conductive film;
 - (iii) forming the second conductive film on the first conductive film through an opening of a mask;
 - (iv) reducing a width of the second conductive film with dry etching;
- doping an impurity element into the semiconductor layer with the first wiring as a mask to form an impurity region;
- forming a second insulating film over the first wiring;
- forming a third insulating film over the second insulating film;
- forming a contact hole to reach the impurity region in the second insulating film and the third insulating film; and
- forming a second wiring electrically connected to the impurity region over the third insulating film.

19. (Previously Presented) A method of manufacturing a semiconductor device according to claim 18 further comprising the steps of:

- forming a third conductive film with a property as a barrier over the third insulating film;
- etching the third conductive film;
- forming a fourth conductive film containing copper as its main component on the third conductive film through an opening of a mask; and
- reducing a width of the fourth conductive film with dry etching to form the second wiring.

20. (Previously Presented) A method of manufacturing a semiconductor device comprising the steps of:

- forming a semiconductor layer over an insulating surface;
- forming a first insulating film over the semiconductor layer;

forming a first wiring comprising at least a laminate of a first conductive film with a property as a barrier and a second conductive film containing copper as its main component, said step of forming a first wiring including the steps of:

- (i) forming the first conductive film over the first insulating film;
- (ii) etching the first conductive film;
- (iii) forming the second conductive film on the first conductive film through an opening of a mask;

- (iv) reducing a width of the second conductive film with dry etching;

doping an impurity element into the semiconductor layer with the first wiring as a mask to form an impurity region;

forming a second insulating film over the first wiring;

forming a third insulating film over the second insulating film;

forming a fourth insulating film over the third insulating film;

forming a contact hole to reach the impurity region in the second insulating film and the third insulating film and the fourth insulating film; and

forming a second wiring electrically connected to the impurity region over the fourth insulating film.

21. (Previously Presented) A method of manufacturing a semiconductor device according to claim 20 further comprising the steps of:

forming a third conductive film with a property as a barrier over the fourth insulating film;

etching the third conductive film;

forming a fourth conductive film containing copper as its main component on the third conductive film through an opening of a mask; and

reducing a width of the fourth conductive film with dry etching to form the second wiring.

22. (Previously Presented) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor layer over an insulating surface;

forming a first insulating film over the semiconductor layer;

forming a first wiring comprising at least a laminate of a first conductive film with a property as a barrier and a second conductive film containing copper as its main component, said step of forming a first wiring including the steps of:

(i) forming the first conductive film over the first insulating film;

(ii) etching the first conductive film;

(iii) forming the second conductive film on the first conductive film through an opening of a mask;

(iv) reducing a width of the second conductive film with dry etching;

doping an impurity element into the semiconductor layer with the first wiring as a mask to form an impurity region;

forming a second insulating film over the first wiring;

forming a contact hole to reach the impurity region in the second insulating film;

and

forming a second wiring electrically connected to the impurity region over the second insulating film,

wherein the first conductive film has a tapered shape.

23. (Previously Presented) A method of manufacturing a semiconductor device according to claim 22 further comprising the steps of:

forming a third conductive film with a property as a barrier over the second insulating film;

etching the third conductive film;

forming a fourth conductive film containing copper as its main component on the third conductive film through an opening of a mask; and

reducing a width of the fourth conductive film with dry etching to form the second wiring.

24. (Previously Presented) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor layer over an insulating surface;

forming a first insulating film over the semiconductor layer;

forming a first wiring comprising at least a laminate of a first conductive film with a property as a barrier and a second conductive film containing copper as its main component, said step of forming a first wiring including the steps of:

(i) forming the first conductive film over the first insulating film;

(ii) etching the first conductive film;

(iii) forming the second conductive film on the first conductive film through an opening of a mask;

(iv) reducing a width of the second conductive film with dry etching;

doping an impurity element into the semiconductor layer with the first wiring as a mask to form an impurity region;

forming a second insulating film over the first wiring;

forming a contact hole to reach the impurity region in the second insulating film;

and

forming a second wiring electrically connected to the impurity region over the second insulating film,

wherein the second conductive film has a tapered shape.

25. (Previously Presented) A method of manufacturing a semiconductor device according to claim 24 further comprising the steps of:

forming a third conductive film with a property as a barrier over the second insulating film;

etching the third conductive film;

forming a fourth conductive film containing copper as its main component on the third conductive film through an opening of a mask; and

reducing a width of the fourth conductive film with dry etching to form the second wiring.

26. (Previously Presented) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor layer over an insulating surface;

forming a first insulating film over the semiconductor layer;

forming a first wiring comprising at least a laminate of a first conductive film with a property as a barrier and a second conductive film containing copper as its main component, said step of forming a first wiring including the steps of:

(i) forming the first conductive film over the first insulating film;

(ii) etching the first conductive film;

(iii) forming the second conductive film on the first conductive film through an opening of a mask;

(iv) reducing a width of the second conductive film with dry etching;

doping an impurity element into the semiconductor layer with the first wiring as a mask to form an impurity region;

forming a second insulating film over the first wiring;

forming a contact hole to reach the impurity region in the second insulating film;

and

forming a second wiring electrically connected to the impurity region over the second insulating film,

wherein the first conductive film has a tapered shape, and

wherein the second conductive film has a tapered shape.

27. (Previously Presented) A method of manufacturing a semiconductor device according to claim 26 further comprising the steps of:

forming a third conductive film with a property as a barrier over the second insulating film;

etching the third conductive film;

forming a fourth conductive film containing copper as its main component on the third conductive film through an opening of a mask; and

reducing a width of the fourth conductive film with dry etching to form the second wiring.

28. (Previously Presented) A method according to claim 18, wherein the first conductive film comprises TiN as its main component.

29. (Previously Presented) A method according to claim 20, wherein the first conductive film comprises TiN as its main component.

30. (Previously Presented) A method according to claim 22, wherein the first conductive film comprises TiN as its main component.

31. (Previously Presented) A method according to claim 24, wherein the first conductive film comprises TiN as its main component.

32. (Previously Presented) A method according to claim 26, wherein the first conductive film comprises TiN as its main component.

33. (Previously Presented) A method according to claim 18, wherein the first conductive film comprises a laminate of a film containing Ti as its main component and a film comprising one of TiN, TaN, WN, TiC, TaC, and silicon.

34. (Previously Presented) A method according to claim 20, wherein the first conductive film comprises a laminate of a film containing Ti as its main component and a film comprising one of TiN, TaN, WN, TiC, TaC, and silicon.

35. (Previously Presented) A method according to claim 22, wherein the first conductive film comprises a laminate of a film containing Ti as its main component and a film comprising one of TiN, TaN, WN, TiC, TaC, and silicon.

36. (Previously Presented) A method according to claim 24, wherein the first conductive film comprises a laminate of a film containing Ti as its main component and a film comprising one of TiN, TaN, WN, TiC, TaC, and silicon.

37. (Previously Presented) A method according to claim 26, wherein the first conductive film comprises a laminate of a film containing Ti as its main component and a film comprising one of TiN, TaN, WN, TiC, TaC, and silicon.

38. (Previously Presented) A method according to claim 18, wherein the first conductive film comprises a laminate of a film containing Ti as its main component and a film comprising one of TiN, TaN, WN, TiC, TaC, and silicon formed on the film containing Ti as its main component.

39. (Previously Presented) A method according to claim 20, wherein the first conductive film comprises a laminate of a film containing Ti as its main component and a film comprising one of TiN, TaN, WN, TiC, TaC, and silicon formed on the film containing Ti as its main component.

40. (Previously Presented) A method according to claim 22, wherein the first

conductive film comprises a laminate of a film containing Ti as its main component and a film comprising one of TiN, TaN, WN, TiC, TaC, and silicon formed on the film containing Ti as its main component.

41. (Previously Presented) A method according to claim 24, wherein the first conductive film comprises a laminate of a film containing Ti as its main component and a film comprising one of TiN, TaN, WN, TiC, TaC, and silicon formed on the film containing Ti as its main component.

42. (Previously Presented) A method according to claim 26, wherein the first conductive film comprises a laminate of a film containing Ti as its main component and a film comprising one of TiN, TaN, WN, TiC, TaC, and silicon formed on the film containing Ti as its main component.

43. (Previously Presented) A method of manufacturing a semiconductor device according to claim 18, wherein an insulating film with a property as a barrier comprising at least one of silicon nitride, silicon oxynitride, aluminum nitride, and aluminum oxynitride is formed with sputtering to cover the second conductive film.

44. (Previously Presented) A method of manufacturing a semiconductor device according to claim 19, wherein an insulating film with a property as a barrier comprising at least one of silicon nitride, silicon oxynitride, aluminum nitride, and aluminum oxynitride is formed with sputtering to cover the fourth conductive film.

45. (Previously Presented) A method of manufacturing a semiconductor device according to claim 22, wherein an insulating film with a property as a barrier comprising at least one of silicon nitride, silicon oxynitride, aluminum nitride, and aluminum oxynitride is formed with sputtering to cover the second conductive film.

46. (Previously Presented) A method of manufacturing a semiconductor device according to claim 23, wherein an insulating film with a property as a barrier comprising at least one of silicon nitride, silicon oxynitride, aluminum nitride, and aluminum oxynitride is formed with sputtering to cover the fourth conductive film.

47. (Previously Presented) A method of manufacturing a semiconductor device according to claim 24, wherein an insulating film with a property as a barrier comprising at least one of silicon nitride, silicon oxynitride, aluminum nitride, and aluminum oxynitride is formed with sputtering to cover the second conductive film.

48. (Previously Presented) A method of manufacturing a semiconductor device according to claim 25, wherein an insulating film with a property as a barrier comprising at least one of silicon nitride, silicon oxynitride, aluminum nitride, and aluminum oxynitride is formed with sputtering to cover the fourth conductive film.

49. (Previously Presented) A method of manufacturing a semiconductor device according to claim 26, wherein an insulating film with a property as a barrier comprising at least one of silicon nitride, silicon oxynitride, aluminum nitride, and aluminum oxynitride is formed with sputtering to cover the second conductive film.

50. (Previously Presented) A method of manufacturing a semiconductor device according to claim 27, wherein an insulating film with a property as a barrier comprising at least one of silicon nitride, silicon oxynitride, aluminum nitride, and aluminum oxynitride is formed with sputtering to cover the fourth conductive film.